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EUROPEAN PATENT APPLICATION

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(71) Applicants:
• Bristol-Myers Squibb Company
New York, N.Y. 10154 (US)
• Mears, Dana
Londonville, NY 12211 (US)

(72) Inventors:
• Greig, Kevin
Leesburg, IN 46538 (US)
• Zwirkoski, Paul A.
Brighton, MI 48116-153 (US)
• Mears, Dana
Londonville, NY 12211 (US)

(74) Representative: **Mays, Julie**
Barker Brettell,
10-12 Priests Bridge
London SW15 5JE (GB)

(54) **Apparatus for performing a minimally invasive total hip arthroplasty**

(57) A method and apparatus for performing minimally invasive total hip arthroplasty are disclosed. Through an anterior incision (44), the femoral neck (60) is severed using an osteotomy guide (78), the acetabulum (54) is prepared, and an acetabular cup is inserted. An awl (106) is provided to locate a posterior incision (46) aligned with the axis of the femoral shaft (62)

through which the femur is prepared using a tubular posterior retractor (122), a reamer (151) and a rasp (204) with a lockable handle (212), to which a provisional femoral head and a selectively lockable provisional neck (222) are attached. The rasp is then removed and the femoral implant (238) is inserted in a bag (242) to keep it clean. Procedures performed through one incision may be observed through the other

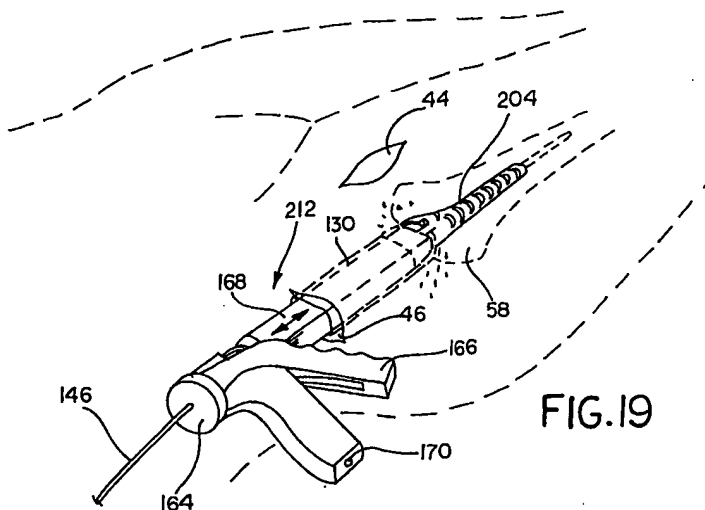


FIG. 19

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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 12 November 2002	Examiner Nice, P
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



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EUROPEAN SEARCH REPORT

Application Number
EP 01 30 3823

DOCUMENTS CONSIDERED TO BE RELEVANT				
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The present search report has been drawn up for all claims				
Place of search THE HAGUE		Date of completion of the search 12 November 2002	Examiner Nice, P	
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>				

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**LACK OF UNITY OF INVENTION
SHEET B**

Application Number
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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1-14

Equipment for hip replacement through two small incisions

2. Claims: 15-27

**Detachable handle and provisional femoral neck both
attachable to a rasp**

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

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